

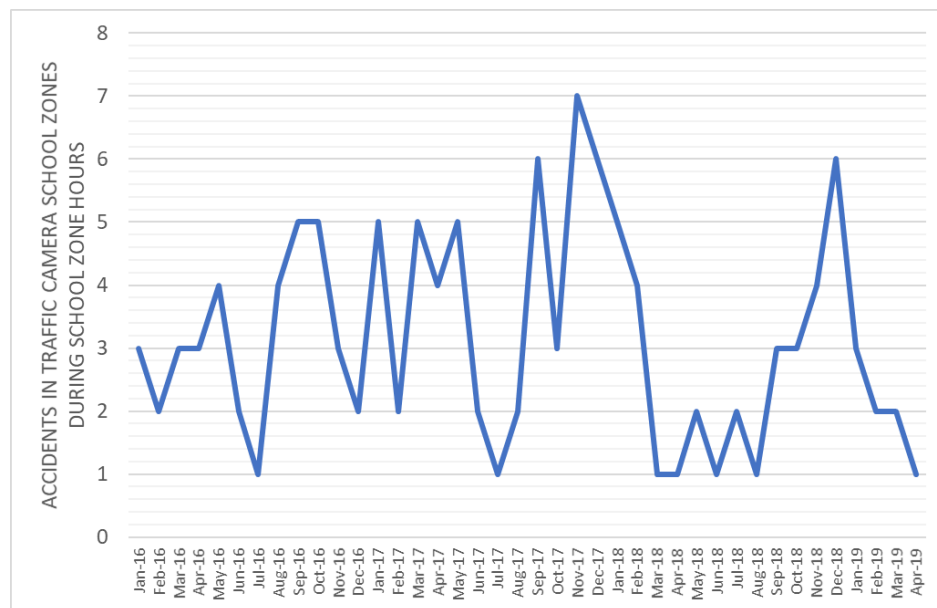


Vehicle Accidents in School Zones: A Preliminary Assessment

A review of data from the New Orleans Police Department shows that vehicle accidents in school zones with traffic cameras are rare, and while vehicle accidents have declined slightly citywide, it is not clear that the addition of those cameras has contributed significantly to the overall decrease.

There were 70,053 vehicle accidents and hit and run incidents in New Orleans from January 1, 2016 through April 18, 2019 according to Calls for Service data, and less than 1 percent of them occurred in a school zone with a traffic camera during school zone hours¹. This dataset can be broken down to provide a before and after comparison of vehicle accidents both citywide and on the blocks that received traffic cameras.

- Vehicle accidents in school zones with active traffic cameras during school hours are rare. Calls for Service data identifies just 126 such incidents on blocks or intersections containing school zone traffic cameras from 2016 to present. These accidents accounted for just 0.18 percent of all vehicle accidents citywide in New Orleans since the start of 2016. There were 480 vehicle accidents in school zones with traffic cameras (if whether the school zone was active at the time is ignored) making up 0.7 percent of all accidents citywide over that timeframe.



- The City of New Orleans installed an additional 39 traffic cameras from June to September 2017. Citywide accidents were 3.2 percent lower from October 1, 2017 to April 18, 2019 relative to the average number of accidents per day before camera installation from January 2016 through May 2017. Accidents per day during school zone hours specifically in school zones with traffic cameras declined 1.7 percent over that timeframe though the decline was not temporally correlated with the installation of the cameras (see above chart showing accidents per month in

¹ This analysis did not account for school holiday hours except in the instance of a fatal accident on Mardi Gras Day. Further analysis identifying only hours where school zones were specifically activated would undoubtedly reduce the percent of accidents even further.

school zones with traffic cameras during school zone hours). The number of accidents per day was unchanged from February to mid-April 2019 relative to the same timeframe in 2018, so it is unclear whether an increase in speed sensitivity of the traffic cameras will have any impact on the number of accidents in school zones.

- The average number of vehicle accidents per day with an injury – as noted in Calls for Service – declined 6.2 percent citywide after the installation of the cameras relative to the period before. But there was a 52.5 percent increase in the average number of accidents with injury per day during school zone hours in school zones with traffic cameras over that stretch. Accidents with injury in school zones with cameras remain exceedingly rare (9 accidents or 0.017 per day in the before timeframe, 15 accidents or 0.027 per day after), suggesting randomness as the most likely explanation for this increase.

There have been no fatal accidents (driver, passenger, or pedestrian killed) during school zone hours in any of the school zones with a traffic camera since at least 2014 according to Calls for Service and data from the National Highway Traffic Safety Administration's Fatality Analysis Reporting System. Pedestrian fatalities in vehicle accidents are rare in New Orleans, making up 29.3 percent of the 147 vehicle accident fatalities here since the start of 2016 according to data from the LSU Highway Safety Research Group (see below table of vehicle accident fatalities in Orleans Parish by age group and type – driver, passenger, or pedestrian – from 2016 through March 2019 per the LSU Highway Safety Research Group).

- Child pedestrian fatalities are even rarer, with no children pedestrians (17 and under) killed in a vehicle accident since 2014 and only 9 reported fatalities since 2005. Child pedestrian injuries are similarly rare, with children pedestrians making up 0.5 percent of all people injured in vehicle accidents since the start of 2016 (167 of 36,518 total people injured).

Age Range	Driver	Passenger	Pedestrian
0-14	0	3	0
15-17	0	3	0
18-20	2	2	0
21-24	3	3	0
25-34	29	5	4
35-44	17	4	3
45-54	12	1	14
55-64	9	2	10
65-74	4	0	5
75-84	0	2	1
85-94	2	0	1
Unknown	0	1	5

An analysis of traffic cameras added from 2008 to 2012 performed by the City of New Orleans suggested a best-case outcome of 23 percent fewer accidents on average in locations with cameras relative to comparison sites. If the addition of 39 traffic cameras in school zones had a similar impact that would

translate to a total of roughly 1 to 3 fewer traffic accidents per month though it is not clear what impact, if any, the new cameras have had.

- The analysis from the City of New Orleans was published in July 2017 and reviewed potential reductions in vehicle accidents following the installation of traffic cameras from 2008 to 2012. That analysis compared intersections with cameras to comparison sites throughout the city and found an average reduction of 23 percent but with “considerable variation across locations, so this finding may not be robust.”
- The impact of the 39 additional cameras in school zones has likely been limited because of the rareness of vehicle accidents in those locations. If those cameras helped reduce all accidents in the associated school zones by 20 percent since installation was completed in September 2017 regardless of whether the school zone was active, then that would translate to 3.2 fewer accidents per month citywide. If the 20 percent reduction only came during active school zone hours, then the cameras might be responsible for .8 fewer accidents per month.

This assessment evaluated vehicle accidents specifically in school zones where cameras were installed in 2017. This assessment did not attempt to compare vehicle accidents in blocks with traffic cameras versus similar comparison blocks as was done in the 2017 analysis. Further research and time would be needed to better understand whether the addition of cameras influenced vehicle accidents in school zones citywide, how cameras added in July 2017 relative to comparison school zones, and whether a reduction in camera sensitivity from 26 MPH to 24 MPH in February 2019 has been accompanied by a reduction in accidents.